SEQUENCE LISTING

<110> Busfield, S.
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Qian, M.
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<120> GLYCOPROTEIN VI AND USES THEREOF

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<151> 2/14/00

<150> 09/454,824
<151> 12/6/99

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gctgagatca caccactgca ctctagctcg ggtgacgaag cctgaccttg tctcaaaaaa    1860
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caatattgct gtccacccca taaatatgta caattatgta tacatttta aaatcataaa    1980
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<210> 2
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<213> Homo sapiens

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gagaagccag tgaccctccg gtgccaggga cctccgggcg tggacctgta ccgcctggag     180
aagctgagtt ccagcaggta ccaggatcag gcagtcctct tcatcccggc catgaagaga     240
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<210> 3
<211> 339
<212> PRT
<213> Homo sapiens

<400> 3

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            20                  25                  30
Leu Pro Ser Ser Leu Val Pro Leu Glu Lys Pro Val Thr Leu Arg Cys
        35                  40                  45
Gln Gly Pro Pro Gly Val Asp Leu Tyr Arg Leu Glu Lys Leu Ser Ser
    50                  55                  60
Ser Arg Tyr Gln Asp Gln Ala Val Leu Phe Ile Pro Ala Met Lys Arg
65                  70                  75                  80
Ser Leu Ala Gly Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser Leu Trp
                85                  90                  95
Ser Leu Pro Ser Asp Gln Leu Glu Leu Val Ala Thr Gly Val Phe Ala
            100                 105                 110
Lys Pro Ser Leu Ser Ala Gln Pro Gly Pro Ala Val Ser Ser Gly Gly
        115                 120                 125
Asp Val Thr Leu Gln Cys Gln Thr Arg Tyr Gly Phe Asp Gln Phe Ala
    130                 135                 140
Leu Tyr Lys Glu Gly Asp Pro Ala Pro Tyr Lys Asn Pro Glu Arg Trp
145                 150                 155                 160
Tyr Arg Ala Ser Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser Gly
                165                 170                 175
Thr Tyr Arg Cys Tyr Ser Phe Ser Ser Arg Asp Pro Tyr Leu Trp Ser
            180                 185                 190
```

```
Ala Pro Ser Asp Pro Leu Glu Leu Val Val Thr Gly Thr Ser Val Thr
        195                 200                 205
Pro Ser Arg Leu Pro Thr Glu Pro Pro Ser Ser Val Ala Glu Phe Ser
    210                 215                 220
Glu Ala Thr Ala Glu Leu Thr Val Ser Phe Thr Asn Lys Val Phe Thr
225                 230                 235                 240
Thr Glu Thr Ser Arg Ser Ile Thr Thr Ser Pro Lys Glu Ser Asp Ser
                245                 250                 255
Pro Ala Gly Pro Ala Arg Gln Tyr Tyr Thr Lys Gly Asn Leu Val Arg
            260                 265                 270
Ile Cys Leu Gly Ala Val Ile Leu Ile Ile Leu Ala Gly Phe Leu Ala
        275                 280                 285
Glu Asp Trp His Ser Arg Arg Lys Arg Leu Arg His Arg Gly Arg Ala
    290                 295                 300
Val Gln Arg Pro Leu Pro Pro Leu Pro Pro Leu Pro Gln Thr Arg Lys
305                 310                 315                 320
Ser His Gly Gly Gln Asp Gly Gly Arg Gln Asp Val His Ser Arg Gly
                325                 330                 335
Leu Cys Ser
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<210> 4
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4

```
Met Ser Pro Ser Pro Thr Ala Leu Phe Cys Leu Gly Leu Cys Leu Gly
 1               5                  10                  15
Arg Val Pro Ala
            20
```

<210> 5
<211> 319
<212> PRT
<213> Homo sapiens

<400> 5

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Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln Ala Leu Pro Ser Ser
 1               5                  10                  15
Leu Val Pro Leu Glu Lys Pro Val Thr Leu Arg Cys Gln Gly Pro Pro
            20                  25                  30
Gly Val Asp Leu Tyr Arg Leu Glu Lys Leu Ser Ser Ser Arg Tyr Gln
        35                  40                  45
Asp Gln Ala Val Leu Phe Ile Pro Ala Met Lys Arg Ser Leu Ala Gly
    50                  55                  60
Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser Leu Trp Ser Leu Pro Ser
65                  70                  75                  80
Asp Gln Leu Glu Leu Val Ala Thr Gly Val Phe Ala Lys Pro Ser Leu
                85                  90                  95
Ser Ala Gln Pro Gly Pro Ala Val Ser Ser Gly Gly Asp Val Thr Leu
            100                 105                 110
Gln Cys Gln Thr Arg Tyr Gly Phe Asp Gln Phe Ala Leu Tyr Lys Glu
        115                 120                 125
Gly Asp Pro Ala Pro Tyr Lys Asn Pro Glu Arg Trp Tyr Arg Ala Ser
    130                 135                 140
Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser Gly Thr Tyr Arg Cys
145                 150                 155                 160
Tyr Ser Phe Ser Ser Arg Asp Pro Tyr Leu Trp Ser Ala Pro Ser Asp
                165                 170                 175
Pro Leu Glu Leu Val Val Thr Gly Thr Ser Val Thr Pro Ser Arg Leu
            180                 185                 190
```

```
Pro Thr Glu Pro Pro Ser Ser Val Ala Glu Phe Ser Glu Ala Thr Ala
        195                 200                 205
Glu Leu Thr Val Ser Phe Thr Asn Lys Val Phe Thr Thr Glu Thr Ser
    210                 215                 220
Arg Ser Ile Thr Thr Ser Pro Lys Glu Ser Asp Ser Pro Ala Gly Pro
225                 230                 235                 240
Ala Arg Gln Tyr Tyr Thr Lys Gly Asn Leu Val Arg Ile Cys Leu Gly
                245                 250                 255
Ala Val Ile Leu Ile Ile Leu Ala Gly Phe Leu Ala Glu Asp Trp His
            260                 265                 270
Ser Arg Arg Lys Arg Leu Arg His Arg Gly Arg Ala Val Gln Arg Pro
        275                 280                 285
Leu Pro Pro Leu Pro Pro Leu Pro Gln Thr Arg Lys Ser His Gly Gly
    290                 295                 300
Gln Asp Gly Gly Arg Gln Asp Val His Ser Arg Gly Leu Cys Ser
305                 310                 315
```

<210> 6
<211> 41
<212> PRT
<213> Homo sapiens

<400> 6

```
Cys Gln Gly Pro Pro Gly Val Asp Leu Tyr Arg Leu Glu Lys Leu Ser
 1               5                  10                  15
Ser Ser Arg Tyr Gln Asp Gln Ala Val Leu Phe Ile Pro Ala Met Lys
            20                  25                  30
Arg Ser Leu Ala Gly Arg Tyr Arg Cys
        35                  40
```

<210> 7
<211> 47
<212> PRT
<213> Homo sapiens

<400> 7

```
Cys Gln Thr Arg Tyr Gly Phe Asp Gln Phe Ala Leu Tyr Lys Glu Gly
 1               5                  10                  15
Asp Pro Ala Pro Tyr Lys Asn Pro Glu Arg Trp Tyr Arg Ala Ser Phe
            20                  25                  30
Pro Ile Ile Thr Val Thr Ala Ala His Ser Gly Thr Tyr Arg Cys
        35                  40                  45
```

<210> 8
<211> 19
<212> PRT
<213> Homo sapiens

<400> 8

```
Leu Val Arg Ile Cys Leu Gly Ala Val Ile Leu Ile Ile Leu Ala Gly
 1               5                  10                  15
Phe Leu Ala
```

<210> 9
<211> 249
<212> PRT
<213> Homo sapiens

<400> 9

```
Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln Ala Leu Pro Ser Ser
 1               5                  10                  15
```

```
Leu Val Pro Leu Glu Lys Pro Val Thr Leu Arg Cys Gln Gly Pro Pro
            20                  25                  30
Gly Val Asp Leu Tyr Arg Leu Glu Lys Leu Ser Ser Ser Arg Tyr Gln
        35                  40                  45
Asp Gln Ala Val Leu Phe Ile Pro Ala Met Lys Arg Ser Leu Ala Gly
    50                  55                  60
Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser Leu Trp Ser Leu Pro Ser
65                  70                  75                  80
Asp Gln Leu Glu Leu Val Ala Thr Gly Val Phe Ala Lys Pro Ser Leu
                85                  90                  95
Ser Ala Gln Pro Gly Pro Ala Val Ser Ser Gly Gly Asp Val Thr Leu
            100                 105                 110
Gln Cys Gln Thr Arg Tyr Gly Phe Asp Gln Phe Ala Leu Tyr Lys Glu
        115                 120                 125
Gly Asp Pro Ala Pro Tyr Lys Asn Pro Glu Arg Trp Tyr Arg Ala Ser
    130                 135                 140
Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser Gly Thr Tyr Arg Cys
145                 150                 155                 160
Tyr Ser Phe Ser Ser Arg Asp Pro Tyr Leu Trp Ser Ala Pro Ser Asp
                165                 170                 175
Pro Leu Glu Leu Val Val Thr Gly Thr Ser Val Thr Pro Ser Arg Leu
            180                 185                 190
Pro Thr Glu Pro Pro Ser Ser Val Ala Glu Phe Ser Glu Ala Thr Ala
        195                 200                 205
Glu Leu Thr Val Ser Phe Thr Asn Lys Val Phe Thr Thr Glu Thr Ser
    210                 215                 220
Arg Ser Ile Thr Thr Ser Pro Lys Glu Ser Asp Ser Pro Ala Gly Pro
225                 230                 235                 240
Ala Arg Gln Tyr Tyr Thr Lys Gly Asn
                245
```

<210> 10
<211> 51
<212> PRT
<213> Homo sapiens

<400> 10

```
Glu Asp Trp His Ser Arg Arg Lys Arg Leu Arg His Arg Gly Arg Ala
 1               5                  10                  15
Val Gln Arg Pro Leu Pro Pro Leu Pro Pro Leu Pro Gln Thr Arg Lys
            20                  25                  30
Ser His Gly Gly Gln Asp Gly Gly Arg Gln Asp Val His Ser Arg Gly
        35                  40                  45
Leu Cys Ser
    50
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<210> 11
<211> 2170
<212> DNA
<213> Homo sapiens

<400> 11

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gcccttcccc aaacccaccc tctgggctga gccaggctct gtgatcagct gggggagccc     180
cgtgaccatc tggtgtcagg ggagcctgga ggcccaggag taccgactgg ataaagaggg     240
aagcccagag cccttggaca gaaataaccc actggaaccc aagaacaagg ccagattctc     300
catcccatcc atgacagagc accatgcggg gagataccgc tgccactatt acagctctgc     360
aggctggtca gagcccagcg acccccctgga gctggtgatg acaggattct acaacaaacc     420
caccctctca gccctgccca gccctgtggt ggcctcaggg gggaatatga ccctccgatg     480
tggctcacag aagggatatc accattttgt tctgatgaag gaaggagaac accagctccc     540
ccggaccctg gactcacagc agctccacag tgggggggttc caggccctgt tccctgtggg     600
```

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gccctccctc ctgaccctgc agggccctgt cctggcccct gggcagagcc tgaccctcca 780
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<210> 12
<211> 631
<212> PRT
<213> Homo sapiens

<400> 12

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 1               5                  10                  15
Pro Arg Thr Arg Val Gln Ala Gly Pro Phe Pro Lys Pro Thr Leu Trp
            20                  25                  30
Ala Glu Pro Gly Ser Val Ile Ser Trp Gly Ser Pro Val Thr Ile Trp
        35                  40                  45
Cys Gln Gly Ser Leu Glu Ala Gln Glu Tyr Arg Leu Asp Lys Glu Gly
    50                  55                  60
Ser Pro Glu Pro Leu Asp Arg Asn Asn Pro Leu Glu Pro Lys Asn Lys
65                  70                  75                  80
Ala Arg Phe Ser Ile Pro Ser Met Thr Glu His His Ala Gly Arg Tyr
                85                  90                  95
Arg Cys His Tyr Tyr Ser Ser Ala Gly Trp Ser Glu Pro Ser Asp Pro
            100                 105                 110
Leu Glu Leu Val Met Thr Gly Phe Tyr Asn Lys Pro Thr Leu Ser Ala
        115                 120                 125
Leu Pro Ser Pro Val Val Ala Ser Gly Gly Asn Met Thr Leu Arg Cys
    130                 135                 140
Gly Ser Gln Lys Gly Tyr His His Phe Val Leu Met Lys Glu Gly Glu
145                 150                 155                 160
His Gln Leu Pro Arg Thr Leu Asp Ser Gln Gln Leu His Ser Gly Gly
                165                 170                 175
Phe Gln Ala Leu Phe Pro Val Gly Pro Val Asn Pro Ser His Arg Trp
            180                 185                 190
Arg Phe Thr Cys Tyr Tyr Tyr Tyr Met Asn Thr Pro Gln Val Trp Ser
        195                 200                 205
His Pro Ser Asp Pro Leu Glu Ile Leu Pro Ser Gly Val Ser Arg Lys
    210                 215                 220
```

```
Pro Ser Leu Leu Thr Leu Gln Gly Pro Val Leu Ala Pro Gly Gln Ser
225                 230                 235                 240
Leu Thr Leu Gln Cys Gly Ser Asp Val Gly Tyr Asp Arg Phe Val Leu
                245                 250                 255
Tyr Lys Glu Gly Glu Arg Asp Phe Leu Gln Arg Pro Gly Gln Gln Pro
            260                 265                 270
Gln Ala Gly Leu Ser Gln Ala Asn Phe Thr Leu Gly Pro Val Ser Pro
        275                 280                 285
Ser His Gly Gly Gln Tyr Arg Cys Tyr Gly Ala His Asn Leu Ser Ser
    290                 295                 300
Glu Trp Ser Ala Pro Ser Asp Pro Leu Asn Ile Leu Met Ala Gly Gln
305                 310                 315                 320
Ile Tyr Asp Thr Val Ser Leu Ser Ala Gln Pro Gly Pro Thr Val Ala
                325                 330                 335
Ser Gly Glu Asn Val Thr Leu Leu Cys Gln Ser Trp Trp Gln Phe Asp
            340                 345                 350
Thr Phe Leu Leu Thr Lys Glu Gly Ala Ala His Pro Pro Leu Arg Leu
        355                 360                 365
Arg Ser Met Tyr Gly Ala His Lys Tyr Gln Ala Glu Phe Pro Met Ser
    370                 375                 380
Pro Val Thr Ser Ala His Ala Gly Thr Tyr Arg Cys Tyr Gly Ser Tyr
385                 390                 395                 400
Ser Ser Asn Pro His Leu Leu Ser Phe Pro Ser Glu Pro Leu Glu Leu
                405                 410                 415
Met Val Ser Gly His Ser Gly Gly Ser Ser Leu Pro Pro Thr Gly Pro
            420                 425                 430
Pro Ser Thr Pro Gly Leu Gly Arg Tyr Leu Glu Val Leu Ile Gly Val
        435                 440                 445
Ser Val Ala Phe Val Leu Leu Leu Phe Leu Leu Leu Phe Leu Leu Leu
    450                 455                 460
Arg Arg Gln Arg His Ser Lys His Arg Thr Ser Asp Gln Arg Lys Thr
465                 470                 475                 480
Asp Phe Gln Arg Pro Ala Gly Ala Ala Glu Thr Glu Pro Lys Asp Arg
                485                 490                 495
Gly Leu Leu Arg Arg Ser Ser Pro Ala Ala Asp Val Gln Glu Glu Asn
            500                 505                 510
Leu Tyr Ala Ala Val Lys Asp Thr Gln Ser Glu Asp Arg Val Glu Leu
        515                 520                 525
Asp Ser Gln Ser Pro His Asp Glu Asp Pro Gln Ala Val Thr Tyr Ala
    530                 535                 540
Pro Val Lys His Ser Ser Pro Arg Arg Glu Met Ala Ser Pro Pro Ser
545                 550                 555                 560
Ser Leu Ser Gly Glu Phe Leu Asp Thr Lys Asp Arg Gln Val Glu Glu
                565                 570                 575
Asp Arg Gln Met Asp Thr Glu Ala Ala Ala Ser Glu Ala Ser Gln Asp
            580                 585                 590
Val Thr Tyr Ala Gln Leu His Ser Leu Thr Leu Arg Arg Lys Ala Thr
        595                 600                 605
Glu Pro Pro Pro Ser Gln Glu Gly Glu Pro Pro Ala Glu Pro Ser Ile
    610                 615                 620
Tyr Ala Thr Leu Ala Ile His
625                 630
```

<210> 13
<211> 50
<212> PRT
<213> Homo sapiens

<400> 13

```
Gly Gln Ser Val Ile Leu Arg Cys Gln Gly Pro Pro Asp Val Asp Leu
 1               5                  10                  15
```

```
Tyr Arg Leu Glu Lys Leu Lys Pro Glu Lys Tyr Glu Asp Gln Asp Phe
            20                  25                  30
Leu Phe Ile Pro Thr Met Glu Arg Ser Asn Ala Gly Arg Tyr Arg Cys
        35                  40                  45
Ser Tyr
    50
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<210> 14
<211> 1163
<212> DNA
<213> Mus musculus

<400> 14

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ccatgtctcc agcctcaccc actttcttct gtattgggct gtgtgtactg caagtgatcc     120
aaacacagag tggcccactc cccaagcctt ccctccaggc tcagcccagt tccctggtac     180
ccctgggtca gtcagttatt ctgaggtgcc agggacctcc agatgtggat ttatatcgcc     240
tggagaaact gaaaccggag aagtatgaag atcaagactt tctcttcatt ccaaccatgg     300
aaagaagtaa tgctggacgg tatcgatgct cttatcagaa tgggagtcac tggtctctcc     360
caagtgacca gcttgagcta attgctacag gtgtgtatgc taaaccctca ctctcagctc     420
atcccagctc agcagtccct caaggcaggg atgtgactct gaagtgccag agcccataca     480
gttttgatga attcgttcta tacaaagaag gggatactgg gccttataag agacctgaga     540
aatggtaccg ggccaatttc cccatcatca cagtgactgc tgctcacagt gggacgtacc     600
ggtgttacag cttctccagc tcatctccat acctgtggtc agccccgagt gaccctctag     660
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ctgtgacaga atcctccagg agaccttcca tcttacccac aaacaaaata tctacaactg     780
aaaagcctat gaatatcact gcctctccag aggggctgag ccctccaatt ggttttgctc     840
atcagcacta tgccaagggg aatctggtcc ggatatgcct tggtgccacg attataataa     900
ttttgttggg gcttctagca gaggattggc acagtcggaa gaaatgcctg caacacagga     960
tgagagcttt gcaaaggcca ctaccacccc tcccactggc ctagaaataa cttggctttc    1020
agcagaggga ttgaccagac atccatgcac aaccatggac atcaccacta gagccacaga    1080
catggacata ctcaagagtg gggaggttat ataaaaaaat gagtgtggag aatâaatgca    1140
gagccaacaa ggtgaaaaaa aaa                                            1163
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<210> 15
<211> 939
<212> DNA
<213> Mus musculus

<400> 15

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ctgggtcagt cagttattct gaggtgccag ggacctccag atgtggattt atatcgcctg     180
gagaaactga aaccggagaa gtatgaagat caagactttc tcttcattcc aaccatggaa     240
agaagtaatg ctggacggta tcgatgctct tatcagaatg ggagtcactg gtctctccca     300
agtgaccagc ttgagctaat tgctacaggt gtgtatgcta aaccctcact ctcagctcat     360
cccagctcag cagtccctca aggcagggat gtgactctga agtgccagag cccatacagt     420
tttgatgaat tcgttctata caaagaaggg gatactgggc cttataagag acctgagaaa     480
tggtaccggg ccaatttccc catcatcaca gtgactgctg ctcacagtgg gacgtaccgg     540
tgttacagct tctccagctc atctccatac ctgtggtcag ccccgagtga ccctctagtg     600
cttgtggtta ctggactctc tgccactccc agccaggtac ccacggaaga atcatttcct     660
gtgacagaat cctccaggag accttccatc ttacccacaa acaaaatatc tacaactgaa     720
aagcctatga atatcactgc ctctccagag gggctgagcc ctccaattgg ttttgctcat     780
cagcactatg ccaaggggaa tctggtccgg atatgccttg gtgccacgat tataataatt     840
ttgttggggc ttctagcaga ggattggcac agtcggaaga aatgcctgca acacaggatg     900
agagctttgc aaaggccact accacccctc ccactggcc                            939
```

<210> 16
<211> 313
<212> PRT
<213> Mus musculus

<400> 16

```
Met Ser Pro Ala Ser Pro Thr Phe Phe Cys Ile Gly Leu Cys Val Leu
 1               5                  10                  15
Gln Val Ile Gln Thr Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln
            20                  25                  30
Ala Gln Pro Ser Ser Leu Val Pro Leu Gly Gln Ser Val Ile Leu Arg
        35                  40                  45
Cys Gln Gly Pro Pro Asp Val Asp Leu Tyr Arg Leu Glu Lys Leu Lys
    50                  55                  60
Pro Glu Lys Tyr Glu Asp Gln Asp Phe Leu Phe Ile Pro Thr Met Glu
65                  70                  75                  80
Arg Ser Asn Ala Gly Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser His
                85                  90                  95
Trp Ser Leu Pro Ser Asp Gln Leu Glu Leu Ile Ala Thr Gly Val Tyr
            100                 105                 110
Ala Lys Pro Ser Leu Ser Ala His Pro Ser Ser Ala Val Pro Gln Gly
        115                 120                 125
Arg Asp Val Thr Leu Lys Cys Gln Ser Pro Tyr Ser Phe Asp Glu Phe
    130                 135                 140
Val Leu Tyr Lys Glu Gly Asp Thr Gly Pro Tyr Lys Arg Pro Glu Lys
145                 150                 155                 160
Trp Tyr Arg Ala Asn Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser
                165                 170                 175
Gly Thr Tyr Arg Cys Tyr Ser Phe Ser Ser Ser Ser Pro Tyr Leu Trp
            180                 185                 190
Ser Ala Pro Ser Asp Pro Leu Val Leu Val Val Thr Gly Leu Ser Ala
        195                 200                 205
Thr Pro Ser Gln Val Pro Thr Glu Glu Ser Phe Pro Val Thr Glu Ser
    210                 215                 220
Ser Arg Arg Pro Ser Ile Leu Pro Thr Asn Lys Ile Ser Thr Thr Glu
225                 230                 235                 240
Lys Pro Met Asn Ile Thr Ala Ser Pro Glu Gly Leu Ser Pro Pro Ile
                245                 250                 255
Gly Phe Ala His Gln His Tyr Ala Lys Gly Asn Leu Val Arg Ile Cys
            260                 265                 270
Leu Gly Ala Thr Ile Ile Ile Ile Leu Leu Gly Leu Leu Ala Glu Asp
        275                 280                 285
Trp His Ser Arg Lys Lys Cys Leu Gln His Arg Met Arg Ala Leu Gln
    290                 295                 300
Arg Pro Leu Pro Pro Leu Pro Leu Ala
305                 310
```

<210> 17
<211> 21
<212> PRT
<213> Mus musculus

<400> 17

```
Met Ser Pro Ala Ser Pro Thr Phe Phe Cys Ile Gly Leu Cys Val Leu
 1               5                  10                  15
Gln Val Ile Gln Thr
            20
```

<210> 18
<211> 292
<212> PRT
<213> Mus musculus

<400> 18

```
Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln Ala Gln Pro Ser Ser
 1               5                  10                  15
```

```
Leu Val Pro Leu Gly Gln Ser Val Ile Leu Arg Cys Gln Gly Pro Pro
            20                  25                  30
Asp Val Asp Leu Tyr Arg Leu Glu Lys Leu Lys Pro Glu Lys Tyr Glu
        35                  40                  45
Asp Gln Asp Phe Leu Phe Ile Pro Thr Met Glu Arg Ser Asn Ala Gly
    50                  55                  60
Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser His Trp Ser Leu Pro Ser
65                  70                  75                  80
Asp Gln Leu Glu Leu Ile Ala Thr Gly Val Tyr Ala Lys Pro Ser Leu
                85                  90                  95
Ser Ala His Pro Ser Ser Ala Val Pro Gln Gly Arg Asp Val Thr Leu
            100                 105                 110
Lys Cys Gln Ser Pro Tyr Ser Phe Asp Glu Phe Val Leu Tyr Lys Glu
        115                 120                 125
Gly Asp Thr Gly Pro Tyr Lys Arg Pro Glu Lys Trp Tyr Arg Ala Asn
    130                 135                 140
Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser Gly Thr Tyr Arg Cys
145                 150                 155                 160
Tyr Ser Phe Ser Ser Ser Ser Pro Tyr Leu Trp Ser Ala Pro Ser Asp
                165                 170                 175
Pro Leu Val Leu Val Val Thr Gly Leu Ser Ala Thr Pro Ser Gln Val
            180                 185                 190
Pro Thr Glu Glu Ser Phe Pro Val Thr Glu Ser Ser Arg Arg Pro Ser
        195                 200                 205
Ile Leu Pro Thr Asn Lys Ile Ser Thr Thr Glu Lys Pro Met Asn Ile
    210                 215                 220
Thr Ala Ser Pro Glu Gly Leu Ser Pro Pro Ile Gly Phe Ala His Gln
225                 230                 235                 240
His Tyr Ala Lys Gly Asn Leu Val Arg Ile Cys Leu Gly Ala Thr Ile
                245                 250                 255
Ile Ile Ile Leu Leu Gly Leu Leu Ala Glu Asp Trp His Ser Arg Lys
            260                 265                 270
Lys Cys Leu Gln His Arg Met Arg Ala Leu Gln Arg Pro Leu Pro Pro
        275                 280                 285
Leu Pro Leu Ala
    290

      <210> 19
      <211> 267
      <212> PRT
      <213> Mus musculus

      <400> 19
Met Ser Pro Ala Ser Pro Thr Phe Phe Cys Ile Gly Leu Cys Val Leu
 1               5                  10                  15
Gln Val Ile Gln Thr Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln
            20                  25                  30
Ala Gln Pro Ser Ser Leu Val Pro Leu Gly Gln Ser Val Ile Leu Arg
        35                  40                  45
Cys Gln Gly Pro Pro Asp Val Asp Leu Tyr Arg Leu Glu Lys Leu Lys
    50                  55                  60
Pro Glu Lys Tyr Glu Asp Gln Asp Phe Leu Phe Ile Pro Thr Met Glu
65                  70                  75                  80
Arg Ser Asn Ala Gly Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser His
                85                  90                  95
Trp Ser Leu Pro Ser Asp Gln Leu Glu Leu Ile Ala Thr Gly Val Tyr
            100                 105                 110
Ala Lys Pro Ser Leu Ser Ala His Pro Ser Ser Ala Val Pro Gln Gly
        115                 120                 125
Arg Asp Val Thr Leu Lys Cys Gln Ser Pro Tyr Ser Phe Asp Glu Phe
    130                 135                 140
```

```
Val Leu Tyr Lys Glu Gly Asp Thr Gly Pro Tyr Lys Arg Pro Glu Lys
145                 150                 155                 160
Trp Tyr Arg Ala Asn Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser
                165                 170                 175
Gly Thr Tyr Arg Cys Tyr Ser Phe Ser Ser Ser Ser Pro Tyr Leu Trp
            180                 185                 190
Ser Ala Pro Ser Asp Pro Leu Val Leu Val Val Thr Gly Leu Ser Ala
        195                 200                 205
Thr Pro Ser Gln Val Pro Thr Glu Glu Ser Phe Pro Val Thr Glu Ser
    210                 215                 220
Ser Arg Arg Pro Ser Ile Leu Pro Thr Asn Lys Ile Ser Thr Thr Glu
225                 230                 235                 240
Lys Pro Met Asn Ile Thr Ala Ser Pro Glu Gly Leu Ser Pro Pro Ile
                245                 250                 255
Gly Phe Ala His Gln His Tyr Ala Lys Gly Asn
            260                 265
```

<210> 20
<211> 19
<212> PRT
<213> Mus musculus

<400> 20

```
Leu Val Arg Ile Cys Leu Gly Ala Thr Ile Ile Ile Ile Leu Leu Gly
 1               5                  10                  15
Leu Leu Ala
```

<210> 21
<211> 27
<212> PRT
<213> Mus musculus

<400> 21

```
Glu Asp Trp His Ser Arg Lys Lys Cys Leu Gln His Arg Met Arg Ala
 1               5                  10                  15
Leu Gln Arg Pro Leu Pro Pro Leu Pro Leu Ala
            20                  25
```

<210> 22
<211> 41
<212> PRT
<213> Mus musculus

<400> 22

```
Cys Gln Gly Pro Pro Asp Val Asp Leu Tyr Arg Leu Glu Lys Leu Lys
 1               5                  10                  15
Pro Glu Lys Tyr Glu Asp Gln Asp Phe Leu Phe Ile Pro Thr Met Glu
            20                  25                  30
Arg Ser Asn Ala Gly Arg Tyr Arg Cys
        35                  40
```

<210> 23
<211> 47
<212> PRT
<213> Mus musculus

<400> 23

```
Cys Gln Ser Pro Tyr Ser Phe Asp Glu Phe Val Leu Tyr Lys Glu Gly
 1               5                  10                  15
Asp Thr Gly Pro Tyr Lys Arg Pro Glu Lys Trp Tyr Arg Ala Asn Phe
            20                  25                  30
```

Pro Ile Ile Thr Val Thr Ala Ala His Ser Gly Thr Tyr Arg Cys
35 40 45

<210> 24
<211> 1896
<212> DNA
<213> Homo sapiens

<400> 24
atgacgcccg ccctcacagc cctgctctgc cttgggctga gtctgggccc caggacccgc 60
gtgcaggcag ggcccttccc caaacccacc ctctgggctg agccaggctc tgtgatcagc 120
tgggggagcc ccgtgaccat ctggtgtcag gggagcctgg aggcccagga gtaccgactg 180
gataaagagg gaagcccaga gcccttggac agaaataacc cactggaacc caagaacaag 240
gccagattct ccatcccatc catgacagag caccatgcgg ggagataccg ctgccactat 300
tacagctctg caggctggtc agagcccagc gacccccctgg agctggtgat gacaggattc 360
tacaacaaac ccaccctctc agccctgccc agccctgtgg tggcctcagg ggggaatatg 420
accctccgat gtggctcaca gaagggatat caccattttg ttctgatgaa ggaaggagaa 480
caccagctcc cccggaccct ggactcacag cagctccaca gtgggggggtt ccaggccctg 540
ttccctgtgg gccccgtgaa ccccagccac aggtggaggt tcacatgcta ttactattat 600
atgaacaccc cccaggtgtg gtcccacccc agtgaccccc tggagattct gccctcaggc 660
gtgtctagga agccctccct cctgaccctg cagggccctg tcctggcccc tgggcagagc 720
ctgaccctcc agtgtggctc tgatgtcggc tacgacagat ttgttctgta taaggagggg 780
gaacgtgact tcctccagcg ccctggccag cagccccagg ctgggctctc ccaggccaac 840
ttcaccctgg gccctgtgag cccctcccac gggggccagt acaggtgcta tggtgcacac 900
aacctctcct ccgagtggtc ggcccccagc gacccccctga acatcctgat ggcaggacag 960
atctatgaca ccgtctccct gtcagcacag ccgggcccca cagtggcctc aggagagaac 1020
gtgaccctgc tgtgtcagtc atggtggcag tttgacactt tccttctgac caaagaaggg 1080
gcagcccatc ccccactgcg tctgagatca atgtacggag ctcataagta ccaggctgaa 1140
ttccccatga gtcctgtgac ctcagcccac gcggggacct acaggtgcta cggctcatac 1200
agctccaacc cccacctgct gtctttcccc agtgagcccc tggaactcat ggtctcagga 1260
cactctggag gctccagcct cccacccaca gggccgccct ccacacctgg tctgggaaga 1320
tacctggagg ttttgattgg ggtctcggtg gccttcgtcc tgctgctctt cctcctcctc 1380
ttcctcctcc tccgacgtca gcgtcacagc aaacacagga catctgacca gagaaagact 1440
gatttccagc gtcctgcagg ggctgcggag acagagccca aggacagggg cctgctgagg 1500
aggtccagcc cagctgctga cgtccaggaa gaaaacctct atgctgccgt gaaggacaca 1560
cagtctgagg acagggtgga gctggacagt cagagcccac acgatgaaga cccccaggca 1620
gtgacgtatg ccccggtgaa acactccagt cctaggagag aaatggcctc tcctccctcc 1680
tcactgtctg gggaattcct ggacacaaag gacagacagg tggaagagga caggcagatg 1740
gacactgagg ctgctgcatc tgaagcctcc caggatgtga cctacgccca gctgcacagc 1800
ttgaccctta gacggaaggc aactgagcct cctccatccc aggaagggga acctccagct 1860
gagcccagca tctacgccac tctggccatc cactag 1896

<210> 25
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer

<400> 25
cagcctcacc cactttcttc 20

<210> 26
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer

<400> 26

ccacaagcac tagagggtca 20

<210> 27
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> sense primer

<400> 27
ttctgtcttg ggctgtgtct g 21

<210> 28
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> anti-sense primer

<400> 28
cccgccagga ttattaggat c 21

<210> 29
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> sense primer

<400> 29
cctgaagctg acagcattcg g 21

<210> 30
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> anti-sense primer

<400> 30
ctcctagagc tacctgtgga g 21

<210> 31
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer

<400> 31
ctgtagctgt tttcagacac acc 23

<210> 32
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer

<400> 32
ccatcacctc tttctggtta c 21

<210> 33
<211> 1017
<212> DNA
<213> Homo sapiens

<400> 33
atgtctccat ccccgaccgc cctcttctgt cttgggctgt gtctggggcg tgtgccagcg 60
cagagtggac cgctccccaa gccctccctc caggttctgc ccagctccct ggtgcccctg 120
gagaagccag tgaccctccg gtgccaggga cctccgggcg tggacctgta ccgcctggag 180
aagctgagtt ccagcaggta ccaggatcag gcagtcctct tcatcccggc catgaagaga 240
agtctggctg gacgctaccg ctgctcctac cagaacggaa gcctctggtc cctgcccagc 300
gaccagctgg agctcgttgc cacgggagtt tttgccaaac cctcgctctc agcccagccc 360
ggcccggcgg tgtcgtcagg aggggacgta accctacagt gtcagactcg gtatggcttt 420
gaccaatttg ctctgtacaa ggaaggggac cctgcgccct acaagaatcc cgagagatgg 480
taccgggcta gtttccccat catcacggtg accgccgccc acagcggaac ctaccgatgc 540
tacagcttct ccagcaggga cccatacctg tggtcggccc ccagcgaccc cctggagctt 600
gtggtcacag gaacctctgt gacccccagc cggttaccaa cagaaccacc ttcctcggta 660
gcagaattct cagaagccac cgctgaactg accgtctcat tcacaaacaa agtcttcaca 720
actgagactt ctaggagtat caccaccagt ccaaaggagt cagactctcc agctggtcct 780
gcccgccagt actacaccaa gggcaacctg gtccggatat gcctcggggc tgtgatccta 840
ataatcctgg cggggtttct ggcagaggac tggcacagcc ggaggaagcg cctgcggcac 900
aggggcaggg ctgtgcagag gccgcttccg cccctgccgc ccctcccgca gacccggaaa 960
tcacacgggg gtcaggatgg aggccgacag gatgttcaca gccgcgggtt atgttca 1017

<210> 34
<211> 339
<212> PRT
<213> Homo sapiens

<400> 34
Met Ser Pro Ser Pro Thr Ala Leu Phe Cys Leu Gly Leu Cys Leu Gly
1 5 10 15
Arg Val Pro Ala Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln Val
20 25 30
Leu Pro Ser Ser Leu Val Pro Leu Glu Lys Pro Val Thr Leu Arg Cys
35 40 45
Gln Gly Pro Pro Gly Val Asp Leu Tyr Arg Leu Glu Lys Leu Ser Ser
50 55 60
Ser Arg Tyr Gln Asp Gln Ala Val Leu Phe Ile Pro Ala Met Lys Arg
65 70 75 80
Ser Leu Ala Gly Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser Leu Trp
85 90 95
Ser Leu Pro Ser Asp Gln Leu Glu Leu Val Ala Thr Gly Val Phe Ala
100 105 110
Lys Pro Ser Leu Ser Ala Gln Pro Gly Pro Ala Val Ser Ser Gly Gly
115 120 125
Asp Val Thr Leu Gln Cys Gln Thr Arg Tyr Gly Phe Asp Gln Phe Ala
130 135 140
Leu Tyr Lys Glu Gly Asp Pro Ala Pro Tyr Lys Asn Pro Glu Arg Trp
145 150 155 160
Tyr Arg Ala Ser Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser Gly
165 170 175
Thr Tyr Arg Cys Tyr Ser Phe Ser Ser Arg Asp Pro Tyr Leu Trp Ser
180 185 190
Ala Pro Ser Asp Pro Leu Glu Leu Val Val Thr Gly Thr Ser Val Thr
195 200 205

```
Pro Ser Arg Leu Pro Thr Glu Pro Pro Ser Ser Val Ala Glu Phe Ser
    210                 215                 220
Glu Ala Thr Ala Glu Leu Thr Val Ser Phe Thr Asn Lys Val Phe Thr
225                 230                 235                 240
Thr Glu Thr Ser Arg Ser Ile Thr Thr Ser Pro Lys Glu Ser Asp Ser
                245                 250                 255
Pro Ala Gly Pro Ala Arg Gln Tyr Tyr Thr Lys Gly Asn Leu Val Arg
            260                 265                 270
Ile Cys Leu Gly Ala Val Ile Leu Ile Ile Leu Ala Gly Phe Leu Ala
        275                 280                 285
Glu Asp Trp His Ser Arg Arg Lys Arg Leu Arg His Arg Gly Arg Ala
    290                 295                 300
Val Gln Arg Pro Leu Pro Pro Leu Pro Pro Leu Pro Gln Thr Arg Lys
305                 310                 315                 320
Ser His Gly Gly Gln Asp Gly Gly Arg Gln Asp Val His Ser Arg Gly
                325                 330                 335
Leu Cys Ser
```

<210> 35
<211> 1017
<212> DNA
<213> Homo sapiens

<400> 35

```
atgtctccat ccccgaccgc cctcttctgt cttgggctgt gtctggggcg tgtgccagcg      60
cagagtggac cgctccccaa gccctccctc caggctctgc ccagctccct ggtgcccctg     120
gagaagccag tgaccctccg gtgccaggga cctccgggcg tggacctgta ccgcctggag     180
aagctgagtt ccagcaggta ccaggatcag gtagtcctct tcatcccggc catgaagaga     240
agtctggctg gacgctaccg ctgctcctac cagaacggaa gcctctggtc cctgcccagc     300
gaccagctgg agctcgttgc cacgggagtt tttgccaaac cctcgctctc agcccagccc     360
ggcccggcgg tgtcgtcagg aggggacgta accctacagt gtcagactcg gtatggcttt     420
gaccaatttg ctctgtacaa ggaaggggac cctgcgccct acaagaatcc cgagagatgg     480
taccgggcta gtttccccat catcacggtg accgccgccc acagcggaac ctaccgatgc     540
tacagcttct ccagcaggga cccatacctg tggtcggccc ccagcgaccc cctggagctt     600
gtggtcacag gaacctctgt gacccccagc cggttaccaa cagaaccacc ttcctcggta     660
gcagaattct cagaagccac cgctgaactg accgtctcat tcacaaacaa agtcttcaca     720
actgagactt ctaggagtat caccaccagt ccaaaggagt cagactctcc agctggtcct     780
gcccgccagt actacaccaa gggcaacctg gtccggatat gcctcggggc tgtgatccta     840
ataatcctgg cggggtttct ggcagaggac tggcacagcc ggaggaagcg cctgcggcac     900
aggggcaggg ctgtgcagag gccgcttccg cccctgccgc ccctcccgca gacccggaaa     960
tcacacgggg gtcaggatgg aggccgacag gatgttcaca gccgcgggtt atgttca       1017
```

<210> 36
<211> 339
<212> PRT
<213> Homo sapiens

<400> 36

```
Met Ser Pro Ser Pro Thr Ala Leu Phe Cys Leu Gly Leu Cys Leu Gly
 1               5                  10                  15
Arg Val Pro Ala Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln Ala
            20                  25                  30
Leu Pro Ser Ser Leu Val Pro Leu Glu Lys Pro Val Thr Leu Arg Cys
        35                  40                  45
Gln Gly Pro Pro Gly Val Asp Leu Tyr Arg Leu Glu Lys Leu Ser Ser
    50                  55                  60
Ser Arg Tyr Gln Asp Gln Val Val Leu Phe Ile Pro Ala Met Lys Arg
65                  70                  75                  80
Ser Leu Ala Gly Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser Leu Trp
                85                  90                  95
```

```
Ser Leu Pro Ser Asp Gln Leu Glu Leu Val Ala Thr Gly Val Phe Ala
            100                 105                 110
Lys Pro Ser Leu Ser Ala Gln Pro Gly Pro Ala Val Ser Ser Gly Gly
        115                 120                 125
Asp Val Thr Leu Gln Cys Gln Thr Arg Tyr Gly Phe Asp Gln Phe Ala
    130                 135                 140
Leu Tyr Lys Glu Gly Asp Pro Ala Pro Tyr Lys Asn Pro Glu Arg Trp
145                 150                 155                 160
Tyr Arg Ala Ser Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser Gly
                165                 170                 175
Thr Tyr Arg Cys Tyr Ser Phe Ser Ser Arg Asp Pro Tyr Leu Trp Ser
            180                 185                 190
Ala Pro Ser Asp Pro Leu Glu Leu Val Val Thr Gly Thr Ser Val Thr
        195                 200                 205
Pro Ser Arg Leu Pro Thr Glu Pro Pro Ser Ser Val Ala Glu Phe Ser
    210                 215                 220
Glu Ala Thr Ala Glu Leu Thr Val Ser Phe Thr Asn Lys Val Phe Thr
225                 230                 235                 240
Thr Glu Thr Ser Arg Ser Ile Thr Thr Ser Pro Lys Glu Ser Asp Ser
                245                 250                 255
Pro Ala Gly Pro Ala Arg Gln Tyr Tyr Thr Lys Gly Asn Leu Val Arg
            260                 265                 270
Ile Cys Leu Gly Ala Val Ile Leu Ile Ile Leu Ala Gly Phe Leu Ala
        275                 280                 285
Glu Asp Trp His Ser Arg Arg Lys Arg Leu Arg His Arg Gly Arg Ala
    290                 295                 300
Val Gln Arg Pro Leu Pro Pro Leu Pro Pro Leu Pro Gln Thr Arg Lys
305                 310                 315                 320
Ser His Gly Gly Gln Asp Gly Gly Arg Gln Asp Val His Ser Arg Gly
                325                 330                 335
Leu Cys Ser
```

<210> 37
<211> 1017
<212> DNA
<213> Homo sapiens

<400> 37

```
atgtctccat ccccgaccgc cctcttctgt cttgggctgt gtctggggcg tgtgccagcg      60
cagagtggac cgctccccaa gccctccctc caggctctgc ccagctccct ggtgcccctg     120
gagaagccag tgaccctccg gtgccaggga cctccgggcg tggacctgta ccgcctggag     180
aagctgagtt ccagcaggta ccaggatcag gcagtcctct tcatcccggc catgaagaga     240
agtctggctg gacgctaccg ctgctcctac cagaacggaa gcctctggtc cctgcccagc     300
gaccagctgg agctcgttgc cacgggagtt tttgccaaac cctcgctctc agcccagccc     360
ggcccggcgg tgtcgtcagg aggggacgta accctacagt gtcagactcg gtatggcttt     420
gaccaatttg ctctgtacaa ggaaggggac cctgcgccct acaagaatcc cgagagatgg     480
taccgggcta gtttccccat catcacggcg accgccgccc acagcggaac ctaccgatgc     540
tacagcttct ccagcaggga cccatacctg tggtcggccc ccagcgaccc cctggagctt     600
gtggtcacag gaacctctgt gacccccagc cggttaccaa cagaaccacc ttcctcggta     660
gcagaattct cagaagccac cgctgaactg accgtctcat tcacaaacaa agtcttcaca     720
actgagactt ctaggagtat caccaccagt ccaaaggagt cagactctcc agctggtcct     780
gcccgccagt actacaccaa gggcaacctg gtccggatat gcctcggggc tgtgatccta     840
ataatcctgg cggggtttct ggcagaggac tggcacagcc ggaggaagcg cctgcggcac     900
aggggcaggg ctgtgcagag gccgcttccg cccctgccgc ccctcccgca gacccggaaa     960
tcacacgggg gtcaggatgg aggccgacag gatgttcaca gccgcgggtt atgttca       1017
```

<210> 38
<211> 339
<212> PRT
<213> Homo sapiens

<400> 38

```
Met Ser Pro Ser Pro Thr Ala Leu Phe Cys Leu Gly Leu Cys Leu Gly
 1               5                  10                  15
Arg Val Pro Ala Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln Ala
            20                  25                  30
Leu Pro Ser Ser Leu Val Pro Leu Glu Lys Pro Val Thr Leu Arg Cys
        35                  40                  45
Gln Gly Pro Pro Gly Val Asp Leu Tyr Arg Leu Glu Lys Leu Ser Ser
    50                  55                  60
Ser Arg Tyr Gln Asp Gln Ala Val Leu Phe Ile Pro Ala Met Lys Arg
65                  70                  75                  80
Ser Leu Ala Gly Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser Leu Trp
                85                  90                  95
Ser Leu Pro Ser Asp Gln Leu Glu Leu Val Ala Thr Gly Val Phe Ala
            100                 105                 110
Lys Pro Ser Leu Ser Ala Gln Pro Gly Pro Ala Val Ser Ser Gly Gly
        115                 120                 125
Asp Val Thr Leu Gln Cys Gln Thr Arg Tyr Gly Phe Asp Gln Phe Ala
    130                 135                 140
Leu Tyr Lys Glu Gly Asp Pro Ala Pro Tyr Lys Asn Pro Glu Arg Trp
145                 150                 155                 160
Tyr Arg Ala Ser Phe Pro Ile Ile Thr Ala Thr Ala Ala His Ser Gly
                165                 170                 175
Thr Tyr Arg Cys Tyr Ser Phe Ser Ser Arg Asp Pro Tyr Leu Trp Ser
            180                 185                 190
Ala Pro Ser Asp Pro Leu Glu Leu Val Val Thr Gly Thr Ser Val Thr
        195                 200                 205
Pro Ser Arg Leu Pro Thr Glu Pro Pro Ser Ser Val Ala Glu Phe Ser
    210                 215                 220
Glu Ala Thr Ala Glu Leu Thr Val Ser Phe Thr Asn Lys Val Phe Thr
225                 230                 235                 240
Thr Glu Thr Ser Arg Ser Ile Thr Thr Ser Pro Lys Glu Ser Asp Ser
                245                 250                 255
Pro Ala Gly Pro Ala Arg Gln Tyr Tyr Thr Lys Gly Asn Leu Val Arg
            260                 265                 270
Ile Cys Leu Gly Ala Val Ile Leu Ile Ile Leu Ala Gly Phe Leu Ala
        275                 280                 285
Glu Asp Trp His Ser Arg Arg Lys Arg Leu Arg His Arg Gly Arg Ala
    290                 295                 300
Val Gln Arg Pro Leu Pro Pro Leu Pro Pro Leu Pro Gln Thr Arg Lys
305                 310                 315                 320
Ser His Gly Gly Gln Asp Gly Gly Arg Gln Asp Val His Ser Arg Gly
                325                 330                 335
Leu Cys Ser
```

<210> 39
<211> 1017
<212> DNA
<213> Homo sapiens

<400> 39

```
atgtctccat ccccgaccgc cctcttctgt cttgggctgt gtctggggcg tgtgccagcg      60
cagagtggac cgctccccaa gccctccctc caggctctgc ccagctccct ggtgcccctg     120
gagaagccag tgaccctccg gtgccaggga cctccgggcg tggacctgta ccgcctggag     180
aagctgagtt ccagcaggta ccaggatcag gcagtcctct tcatcccggc catgaagaga     240
agtctggctg gacgctaccg ctgctcctac cagaacggaa gcctctggtc cctgcccagc     300
gaccagctgg agctcgttgc cacgggagtt tttgccaaac cctcgctctc agcccagccc     360
ggcccggcgg tgtcgtcagg aggggacgta accctacagt gtcagactcg gtatggcttt     420
gaccaatttg ctctgtacaa ggaaggggac cctgcgccct acaagaatcc cgagagatgg     480
taccgggcta gtttccccat catcacggtg accgccgccc acagcggaac ctaccgatgc     540
tacagcttct ccagcaggga cccatacctg tggtcggtcc ccagcgaccc cctggagctt     600
```

```
gtggtcacag gaacctctgt gacccccagc cggttaccaa cagaaccacc ttcctcggta     660
gcagaattct cagaagccac cgctgaactg accgtctcat tcacaaacaa agtcttcaca     720
actgagactt ctaggagtat caccaccagt ccaaaggagt cagactctcc agctggtcct     780
gcccgccagt actacaccaa gggcaacctg gtccggatat gcctcggggc tgtgatccta     840
ataatcctgg cggggtttct ggcagaggac tggcacagcc ggaggaagcg cctgcggcac     900
aggggcaggg ctgtgcagag gccgcttccg cccctgccgc ccctcccgca gacccggaaa     960
tcacacgggg gtcaggatgg aggccgacag gatgttcaca gccgcgggtt atgttca       1017
```

<210> 40
<211> 339
<212> PRT
<213> Homo sapiens

<400> 40

```
Met Ser Pro Ser Pro Thr Ala Leu Phe Cys Leu Gly Leu Cys Leu Gly
 1               5                  10                  15
Arg Val Pro Ala Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln Ala
            20                  25                  30
Leu Pro Ser Ser Leu Val Pro Leu Glu Lys Pro Val Thr Leu Arg Cys
        35                  40                  45
Gln Gly Pro Pro Gly Val Asp Leu Tyr Arg Leu Glu Lys Leu Ser Ser
    50                  55                  60
Ser Arg Tyr Gln Asp Gln Ala Val Leu Phe Ile Pro Ala Met Lys Arg
65                  70                  75                  80
Ser Leu Ala Gly Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser Leu Trp
                85                  90                  95
Ser Leu Pro Ser Asp Gln Leu Glu Leu Val Ala Thr Gly Val Phe Ala
            100                 105                 110
Lys Pro Ser Leu Ser Ala Gln Pro Gly Pro Ala Val Ser Ser Gly Gly
        115                 120                 125
Asp Val Thr Leu Gln Cys Gln Thr Arg Tyr Gly Phe Asp Gln Phe Ala
    130                 135                 140
Leu Tyr Lys Glu Gly Asp Pro Ala Pro Tyr Lys Asn Pro Glu Arg Trp
145                 150                 155                 160
Tyr Arg Ala Ser Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser Gly
                165                 170                 175
Thr Tyr Arg Cys Tyr Ser Phe Ser Ser Arg Asp Pro Tyr Leu Trp Ser
            180                 185                 190
Val Pro Ser Asp Pro Leu Glu Leu Val Val Thr Gly Thr Ser Val Thr
        195                 200                 205
Pro Ser Arg Leu Pro Thr Glu Pro Pro Ser Ser Val Ala Glu Phe Ser
    210                 215                 220
Glu Ala Thr Ala Glu Leu Thr Val Ser Phe Thr Asn Lys Val Phe Thr
225                 230                 235                 240
Thr Glu Thr Ser Arg Ser Ile Thr Thr Ser Pro Lys Glu Ser Asp Ser
                245                 250                 255
Pro Ala Gly Pro Ala Arg Gln Tyr Tyr Thr Lys Gly Asn Leu Val Arg
            260                 265                 270
Ile Cys Leu Gly Ala Val Ile Leu Ile Ile Leu Ala Gly Phe Leu Ala
        275                 280                 285
Glu Asp Trp His Ser Arg Arg Lys Arg Leu Arg His Arg Gly Arg Ala
    290                 295                 300
Val Gln Arg Pro Leu Pro Pro Leu Pro Pro Leu Pro Gln Thr Arg Lys
305                 310                 315                 320
Ser His Gly Gly Gln Asp Gly Gly Arg Gln Asp Val His Ser Arg Gly
                325                 330                 335
Leu Cys Ser
```

<210> 41
<211> 939
<212> DNA

<213> Mus musculus

<400> 41

```
atgtctccag cctcacccac tttcttctgt attgggctgt gtgtactgca agtgatccaa      60
acacagagtg gcccactccc caagccttcc ctccaggctc agcccagttc cctggtaccc     120
ctgggtcagt cagttattct gaggtgccag ggacctccag atgtggattt atatcgcctg     180
gagaaactga aaccggagaa gtatgaagat caagactttc tcttcattcc aaccatggaa     240
agaagtaatg ttggacggta tcgatgctct tatcagaatg ggagtcactg gtctctccca     300
agtgaccagc ttgagctaat tgctacaggt gtgtatgcta aaccctcact ctcagctcat     360
cccagctcag cagtccctca aggcagggat gtgactctga agtgccagag cccatacagt     420
tttgatgaat tcgttctata caaagaaggg gatactgggc cttataagag acctgagaaa     480
tggtaccggg ccaatttccc catcatcaca gtgactgctg ctcacagtgg gacgtaccgg     540
tgttacagct tctccagctc atctccatac ctgtggtcag ccccgagtga ccctctagtg     600
cttgtggtta ctggactctc tgccactccc agccaggtac ccacggaaga atcatttcct     660
gtgacagaat cctccaggag accttccatc ttacccacaa acaaaatatc tacaactgaa     720
aagcctatga atatcactgc ctctccagag gggctgagcc ctccaattgg ttttgctcat     780
cagcactatg ccaaggggaa tctggtccgg atatgccttg gtgccacgat tataataatt     840
ttgttggggc ttctagcaga ggattggcac agtcggaaga aatgcctgca acacaggatg     900
agagctttgc aaaggccact accacccctc ccactggcc                            939
```

<210> 42
<211> 313
<212> PRT
<213> Mus musculus

<400> 42

```
Met Ser Pro Ala Ser Pro Thr Phe Phe Cys Ile Gly Leu Cys Val Leu
 1               5                  10                  15
Gln Val Ile Gln Thr Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln
            20                  25                  30
Ala Gln Pro Ser Ser Leu Val Pro Leu Gly Gln Ser Val Ile Leu Arg
        35                  40                  45
Cys Gln Gly Pro Pro Asp Val Asp Leu Tyr Arg Leu Glu Lys Leu Lys
    50                  55                  60
Pro Glu Lys Tyr Glu Asp Gln Asp Phe Leu Phe Ile Pro Thr Met Glu
65                  70                  75                  80
Arg Ser Asn Val Gly Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser His
                85                  90                  95
Trp Ser Leu Pro Ser Asp Gln Leu Glu Leu Ile Ala Thr Gly Val Tyr
            100                 105                 110
Ala Lys Pro Ser Leu Ser Ala His Pro Ser Ser Ala Val Pro Gln Gly
        115                 120                 125
Arg Asp Val Thr Leu Lys Cys Gln Ser Pro Tyr Ser Phe Asp Glu Phe
    130                 135                 140
Val Leu Tyr Lys Glu Gly Asp Thr Gly Pro Tyr Lys Arg Pro Glu Lys
145                 150                 155                 160
Trp Tyr Arg Ala Asn Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser
                165                 170                 175
Gly Thr Tyr Arg Cys Tyr Ser Phe Ser Ser Ser Ser Pro Tyr Leu Trp
            180                 185                 190
Ser Ala Pro Ser Asp Pro Leu Val Leu Val Val Thr Gly Leu Ser Ala
        195                 200                 205
Thr Pro Ser Gln Val Pro Thr Glu Glu Ser Phe Pro Val Thr Glu Ser
    210                 215                 220
Ser Arg Arg Pro Ser Ile Leu Pro Thr Asn Lys Ile Ser Thr Thr Glu
225                 230                 235                 240
Lys Pro Met Asn Ile Thr Ala Ser Pro Glu Gly Leu Ser Pro Pro Ile
                245                 250                 255
Gly Phe Ala His Gln His Tyr Ala Lys Gly Asn Leu Val Arg Ile Cys
            260                 265                 270
Leu Gly Ala Thr Ile Ile Ile Ile Leu Leu Gly Leu Leu Ala Glu Asp
        275                 280                 285
```

```
Trp His Ser Arg Lys Lys Cys Leu Gln His Arg Met Arg Ala Leu Gln
    290                 295                 300
Arg Pro Leu Pro Pro Leu Pro Leu Ala
305                 310
```

<210> 43
<211> 939
<212> DNA
<213> Mus musculus

<400> 43

```
atgtctccag cctcacccac tttcttctgt attgggctgt gtgtactgca agtgatccaa      60
acacagagtg gcccactccc caagccttcc ctccaggctc agcccagttc cctggtaccc     120
ctgggtcagt cagttattct gaggtgccag ggacctccag atgtggattt atatcgcctg     180
gagaaactga aaccggagaa gtatgaagat caagactttc tcttcattcc aaccatggaa     240
agaagtaatg ctggacggta tcgatgctct tatcagaatg ggagtcactg gtctctccca     300
agtgaccagc ttgagctaat tgctacaggt gtgtatgcta aaccctcact ctcagctcat     360
cccagctcag cagtccctca aggcagggat gtgactctga agtgccagag cccatacagt     420
tttgatgaat tcgttctata caaagaaggg gatactgggc cttataagag acctgagaaa     480
tggtaccggg tcaatttccc catcatcaca gtgactgctg ctcacagtgg gacgtaccgg     540
tgttacagct tctccagctc atctccatac ctgtggtcag ccccgagtga ccctctagtg     600
cttgtggtta ctggactctc tgccactccc agccaggtac ccacggaaga atcatttcct     660
gtgacagaat cctccaggag accttccatc ttacccacaa acaaaatatc tacaactgaa     720
aagcctatga atatcactgc ctctccagag gggctgagcc ctccaattgg ttttgctcat     780
cagcactatg ccaaggggaa tctggtccgg atatgccttg gtgccacgat tataataatt     840
ttgttggggc ttctagcaga ggattggcac agtcggaaga aatgcctgca acacaggatg     900
agagctttgc aaaggccact accacccctc ccactggcc                            939
```

<210> 44
<211> 313
<212> PRT
<213> Mus musculus

<400> 44

```
Met Ser Pro Ala Ser Pro Thr Phe Phe Cys Ile Gly Leu Cys Val Leu
 1               5                  10                  15
Gln Val Ile Gln Thr Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln
            20                  25                  30
Ala Gln Pro Ser Ser Leu Val Pro Leu Gly Gln Ser Val Ile Leu Arg
        35                  40                  45
Cys Gln Gly Pro Pro Asp Val Asp Leu Tyr Arg Leu Glu Lys Leu Lys
    50                  55                  60
Pro Glu Lys Tyr Glu Asp Gln Asp Phe Leu Phe Ile Pro Thr Met Glu
65                  70                  75                  80
Arg Ser Asn Ala Gly Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser His
                85                  90                  95
Trp Ser Leu Pro Ser Asp Gln Leu Glu Leu Ile Ala Thr Gly Val Tyr
            100                 105                 110
Ala Lys Pro Ser Leu Ser Ala His Pro Ser Ser Ala Val Pro Gln Gly
        115                 120                 125
Arg Asp Val Thr Leu Lys Cys Gln Ser Pro Tyr Ser Phe Asp Glu Phe
    130                 135                 140
Val Leu Tyr Lys Glu Gly Asp Thr Gly Pro Tyr Lys Arg Pro Glu Lys
145                 150                 155                 160
Trp Tyr Arg Val Asn Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser
                165                 170                 175
Gly Thr Tyr Arg Cys Tyr Ser Phe Ser Ser Ser Ser Pro Tyr Leu Trp
            180                 185                 190
Ser Ala Pro Ser Asp Pro Leu Val Leu Val Val Thr Gly Leu Ser Ala
        195                 200                 205
Thr Pro Ser Gln Val Pro Thr Glu Glu Ser Phe Pro Val Thr Glu Ser
    210                 215                 220
```

```
Ser Arg Arg Pro Ser Ile Leu Pro Thr Asn Lys Ile Ser Thr Thr Glu
225                 230                 235                 240
Lys Pro Met Asn Ile Thr Ala Ser Pro Glu Gly Leu Ser Pro Pro Ile
                245                 250                 255
Gly Phe Ala His Gln His Tyr Ala Lys Gly Asn Leu Val Arg Ile Cys
            260                 265                 270
Leu Gly Ala Thr Ile Ile Ile Ile Leu Leu Gly Leu Leu Ala Glu Asp
        275                 280                 285
Trp His Ser Arg Lys Lys Cys Leu Gln His Arg Met Arg Ala Leu Gln
    290                 295                 300
Arg Pro Leu Pro Pro Leu Pro Leu Ala
305                 310
```

<210> 45
<211> 939
<212> DNA
<213> Mus musculus

<400> 45

```
atgtctccag cctcacccac tttcttctgt attgggctgt gtgtactgca agtgatccaa      60
acacagagtg gcccactccc caagccttcc ctccaggctc agcccagttc cctggtaccc     120
ctgggtcagt cagttattct gaggtgccag ggacctccag atgtggattt atatcgcctg     180
gagaaactga aaccggagaa gtatgaagat caagactttc tcttcattcc aaccatggaa     240
agaagtaatg ctggacggta tcgatgctct tatcagaatg ggagtcactg gtctctccca     300
agtgaccagc ttgagctaat tgctacaggt gtgtatgcta aaccctcact ctcagctcat     360
cccagctcag cagcccctca aggcagggat gtgactctga agtgccagag cccatacagt     420
tttgatgaat tcgttctata caaagaaggg gatactgggc cttataagag acctgagaaa     480
tggtaccggg ccaatttccc catcatcaca gtgactgctg ctcacagtgg gacgtaccgg     540
tgttacagct tctccagctc atctccatac ctgtggtcag ccccgagtga ccctctagtg     600
cttgtggtta ctggactctc tgccactccc agccaggtac ccacggaaga atcatttcct     660
gtgacagaat cctccaggag accttccatc ttacccacaa acaaaatatc tacaactgaa     720
aagcctatga atatcactgc ctctccagag gggctgagcc ctccaattgg ttttgctcat     780
cagcactatg ccaaggggaa tctggtccgg atatgccttg gtgccacgat tataataatt     840
ttgttggggc ttctagcaga ggattggcac agtcggaaga aatgcctgca acacaggatg     900
agagctttgc aaaggccact accacccctc ccactggcc                            939
```

<210> 46
<211> 313
<212> PRT
<213> Mus musculus

<400> 46

```
Met Ser Pro Ala Ser Pro Thr Phe Phe Cys Ile Gly Leu Cys Val Leu
 1               5                  10                  15
Gln Val Ile Gln Thr Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln
            20                  25                  30
Ala Gln Pro Ser Ser Leu Val Pro Leu Gly Gln Ser Val Ile Leu Arg
        35                  40                  45
Cys Gln Gly Pro Pro Asp Val Asp Leu Tyr Arg Leu Glu Lys Leu Lys
    50                  55                  60
Pro Glu Lys Tyr Glu Asp Gln Asp Phe Leu Phe Ile Pro Thr Met Glu
65                  70                  75                  80
Arg Ser Asn Ala Gly Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser His
                85                  90                  95
Trp Ser Leu Pro Ser Asp Gln Leu Glu Leu Ile Ala Thr Gly Val Tyr
            100                 105                 110
Ala Lys Pro Ser Leu Ser Ala His Pro Ser Ser Ala Ala Pro Gln Gly
        115                 120                 125
Arg Asp Val Thr Leu Lys Cys Gln Ser Pro Tyr Ser Phe Asp Glu Phe
    130                 135                 140
Val Leu Tyr Lys Glu Gly Asp Thr Gly Pro Tyr Lys Arg Pro Glu Lys
145                 150                 155                 160
```

```
Trp Tyr Arg Ala Asn Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser
                165                 170                 175
Gly Thr Tyr Arg Cys Tyr Ser Phe Ser Ser Ser Ser Pro Tyr Leu Trp
            180                 185                 190
Ser Ala Pro Ser Asp Pro Leu Val Leu Val Val Thr Gly Leu Ser Ala
        195                 200                 205
Thr Pro Ser Gln Val Pro Thr Glu Glu Ser Phe Pro Val Thr Glu Ser
    210                 215                 220
Ser Arg Arg Pro Ser Ile Leu Pro Thr Asn Lys Ile Ser Thr Thr Glu
225                 230                 235                 240
Lys Pro Met Asn Ile Thr Ala Ser Pro Glu Gly Leu Ser Pro Pro Ile
                245                 250                 255
Gly Phe Ala His Gln His Tyr Ala Lys Gly Asn Leu Val Arg Ile Cys
            260                 265                 270
Leu Gly Ala Thr Ile Ile Ile Ile Leu Leu Gly Leu Leu Ala Glu Asp
        275                 280                 285
Trp His Ser Arg Lys Lys Cys Leu Gln His Arg Met Arg Ala Leu Gln
    290                 295                 300
Arg Pro Leu Pro Pro Leu Pro Leu Ala
305                 310
```

<210> 47
<211> 939
<212> DNA
<213> Mus musculus

<400> 47

```
atgtctccag cctcacccac tttcttctgt attgggctgt gtgtactgca agtgatccaa      60
acacagagtg gcccactccc caagccttcc ctccaggctc agcccagttc cctggtaccc     120
ctgggtcagt cagttattct gaggtgccag ggacctccag atgtggattt atatcgcctg     180
gagaaactga aaccggagaa gtatgaagat caagactttc tcttcattcc aaccatggaa     240
agaagtaatg ctggacggta tcgatgctct tatcagaatg ggagtcactg gtctctccca     300
agtgaccagc ttgagctaat tgctacaggt gtgtatgcta aaccctcact ctcagctcat     360
cccagctcag cagtccctca aggcagggat gtgactctga agtgccagag cccatacagt     420
tttgatgaat tcgttctata caaagaaggg gatactgggc cttataagag acctgagaaa     480
tggtaccggg ccaatttccc catcatcaca gtgactgctg ctcacagtgg gacgtaccgg     540
tgttacagct tctccagctc atctccatac ctgtggtcag ccccgagtga ccctctagtg     600
cttgtggtta ctggactctc tgccactccc agccaggtac ccacggaaga atcatttcct     660
gtgacagaat cctccaggag accttccatc ttacccacaa acaaaatatc tacaactgaa     720
aagcctatga atatcactgc ctctccagag gggctgagcc ctccaattgg ttttgctcat     780
cagcactatg tcaaggggaa tctggtccgg atatgccttg gtgccacgat tataataatt     840
ttgttggggc ttctagcaga ggattggcac agtcggaaga aatgcctgca acacaggatg     900
agagctttgc aaaggccact accacccctc ccactggcc                            939
```

<210> 48
<211> 313
<212> PRT
<213> Mus musculus

<400> 48

```
Met Ser Pro Ala Ser Pro Thr Phe Phe Cys Ile Gly Leu Cys Val Leu
 1               5                  10                  15
Gln Val Ile Gln Thr Gln Ser Gly Pro Leu Pro Lys Pro Ser Leu Gln
            20                  25                  30
Ala Gln Pro Ser Ser Leu Val Pro Leu Gly Gln Ser Val Ile Leu Arg
        35                  40                  45
Cys Gln Gly Pro Pro Asp Val Asp Leu Tyr Arg Leu Glu Lys Leu Lys
    50                  55                  60
Pro Glu Lys Tyr Glu Asp Gln Asp Phe Leu Phe Ile Pro Thr Met Glu
65                  70                  75                  80
Arg Ser Asn Ala Gly Arg Tyr Arg Cys Ser Tyr Gln Asn Gly Ser His
                85                  90                  95
```

```
Trp Ser Leu Pro Ser Asp Gln Leu Glu Leu Ile Ala Thr Gly Val Tyr
            100                 105                 110
Ala Lys Pro Ser Leu Ser Ala His Pro Ser Ser Ala Val Pro Gln Gly
        115                 120                 125
Arg Asp Val Thr Leu Lys Cys Gln Ser Pro Tyr Ser Phe Asp Glu Phe
    130                 135                 140
Val Leu Tyr Lys Glu Gly Asp Thr Gly Pro Tyr Lys Arg Pro Glu Lys
145                 150                 155                 160
Trp Tyr Arg Ala Asn Phe Pro Ile Ile Thr Val Thr Ala Ala His Ser
                165                 170                 175
Gly Thr Tyr Arg Cys Tyr Ser Phe Ser Ser Ser Ser Pro Tyr Leu Trp
            180                 185                 190
Ser Ala Pro Ser Asp Pro Leu Val Leu Val Val Thr Gly Leu Ser Ala
        195                 200                 205
Thr Pro Ser Gln Val Pro Thr Glu Glu Ser Phe Pro Val Thr Glu Ser
    210                 215                 220
Ser Arg Arg Pro Ser Ile Leu Pro Thr Asn Lys Ile Ser Thr Thr Glu
225                 230                 235                 240
Lys Pro Met Asn Ile Thr Ala Ser Pro Glu Gly Leu Ser Pro Pro Ile
                245                 250                 255
Gly Phe Ala His Gln His Tyr Val Lys Gly Asn Leu Val Arg Ile Cys
            260                 265                 270
Leu Gly Ala Thr Ile Ile Ile Ile Leu Leu Gly Leu Leu Ala Glu Asp
        275                 280                 285
Trp His Ser Arg Lys Lys Cys Leu Gln His Arg Met Arg Ala Leu Gln
    290                 295                 300
Arg Pro Leu Pro Pro Leu Pro Leu Ala
305                 310
```

<210> 49
<211> 5
<212> PRT
<213> Homo sapiens

<400> 49

```
Ser Tyr Trp Ile Ser
 1               5
```

<210> 50
<211> 17
<212> PRT
<213> Homo sapiens

<400> 50

```
Arg Ile Asp Pro Ser Asp Ser Tyr Thr Asn Tyr Ser Pro Ser Phe Gln
 1               5                  10                  15
Gly
```

<210> 51
<211> 11
<212> PRT
<213> Homo sapiens

<400> 51

```
His Gly Ser Asp Arg Gly Trp Gly Phe Asp Pro
 1               5                  10
```

<210> 52
<211> 8
<212> PRT
<213> Homo sapiens

<400> 52
Asn Gly Val Asn Ser Asp Val Gly
1 5

<210> 53
<211> 7
<212> PRT
<213> Homo sapiens

<400> 53
Glu Val Asn Lys Arg Pro Ser
1 5

<210> 54
<211> 9
<212> PRT
<213> Homo sapiens

<400> 54
Ser Tyr Thr Ser Asn Asn Thr Pro Val
1 5

<210> 55
<211> 5
<212> PRT
<213> Homo sapiens

<400> 55
Ser Tyr Ser Met Asn
1 5

<210> 56
<211> 17
<212> PRT
<213> Homo sapiens

<400> 56
Ser Ile Ser Ser Ser Gly Arg Tyr Ile Ser Tyr Gly Asp Ser Val Lys
1 5 10 15
Gly

<210> 57
<211> 8
<212> PRT
<213> Homo sapiens

<400> 57
Asp Ile Ser Ser Ala Met Asp Val
1 5

<210> 58
<211> 13
<212> PRT
<213> Homo sapiens

<400> 58
Thr Arg Gly Gly Asn Asn Ile Gly Ser Lys Ser Val His
1 5 10

<210> 59
<211> 7

<212> PRT
<213> Homo sapiens

<400> 59
Asp Asp Ser Asp Arg Pro Ser
1 5

<210> 60
<211> 10
<212> PRT
<213> Homo sapiens

<400> 60
Val Trp Asp Ser Ser Ser Asp His His Val
1 5 10

<210> 61
<211> 5
<212> PRT
<213> Homo sapiens

<400> 61
Ser Tyr Trp Met Ser
1 5

<210> 62
<211> 17
<212> PRT
<213> Homo sapiens

<400> 62
Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Ala Asp Ser Val Arg
1 5 10 15
Gly

<210> 63
<211> 14
<212> PRT
<213> Homo sapiens

<400> 63
Asp Lys Trp Glu Ala Tyr Ile Thr Pro Gly Ala Phe Asp Val
1 5 10

<210> 64
<211> 13
<212> PRT
<213> Homo sapiens

<400> 64
Thr Arg Ser Ser Gly Ser Ile Ala Ser Asn Tyr Val Gln
1 5 10

<210> 65
<211> 7
<212> PRT
<213> Homo sapiens

<400> 65
Glu Asp Asn Gln Arg Pro Ser
1 5

<210> 66
<211> 8
<212> PRT
<213> Homo sapiens

<400> 66
Ser Tyr Asp Ser Ser Asn Val Val
1 5

<210> 67
<211> 5
<212> PRT
<213> Homo sapiens

<400> 67
Asn Tyr Glu Met Asn
1 5

<210> 68
<211> 17
<212> PRT
<213> Homo sapiens

<400> 68
Tyr Ile Ser Ser Ser Gly Ser Thr Ile His Asn Ala Asp Ser Val Lys
1 5 10 15
Gly

<210> 69
<211> 12
<212> PRT
<213> Homo sapiens

<400> 69
Asp Gly Tyr Ser His Gly Leu Asp Ala Phe Asp Ile
1 5 10

<210> 70
<211> 13
<212> PRT
<213> Homo sapiens

<400> 70
Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val His
1 5 10

<210> 71
<211> 7
<212> PRT
<213> Homo sapiens

<400> 71
Ser Tyr Asn Gln Arg Pro Ser
1 5

<210> 72
<211> 10
<212> PRT
<213> Homo sapiens

<400> 72

Ser Trp Asp Asp Arg Leu Asn Gly Tyr Leu
1 5 10